D'YACHENKO, L. N. D'YACHENKO, L. N.

"On the Connection between the Radiation Balance and the Total Radiation". Conference of Young Experts of the Main Geophysical Observatory imeni A. I. Voyeykov,

Meteorologiya i Gidrologiya, 1958, Nr. 2, pp. 61-61 (USSR)

This conference took place from October 28th -29th 1957; assistants of the Leningrad University, of the arctic Scientific Research Institute, of the All-Soviet Institute for Plant Breeding and others took part in it. Lectures were held by young scientists of the conference. A. S. Grigor'yeva's lecture on "the Horizontal Synchronizing Pulse in the Atmosphere" dealth with the computation of the atmospheric coefficient on various isobar surfaces with references to the air current.
L. P. Spirina's lecture dealth with the forcasts of the monthly temperature anomalies with reference to the inertia laws. N. A. Timofeyev reported on the calculations of show melting. On the Strength of the known laws by Prandtl and of the stage law by D. L. Laykhtman, a formula for the computation of the heat-exchange between snow surface and atmosphere with reference to thermal layer formations was obtained and the computation nomographs were represented.

AUTHOR: D'yachenko, L. N. SOV/50-58-8-6/18

TITLE: The Connection Between Radiation Balance and Total Radiation (Svyaz' mezhdu radiatsionnym balansom i summarnoy radiatsiyey)

PERIODICAL: Meteorologiya i gidrologiya, 1958, Nr 8, pp. 29-33 (USSR)

ABSTRACT: The balance mentioned in the title represents one of the most important characteristics of climate. However, it is measured in only few stations, and the observation series are very short. Therefore it was necessary to prolongate the observation series of this balance, especially by evaluation of the connection mentioned in the title. This connection is expressed by the formula:

$$\Sigma B \approx 0{,}6\,\Sigma Q - 15 \quad (1)$$

for the average values per 24 hours during the warm season. In the present paper the author tries to evaluate the mentioned connection for the computation of the values of the balance B from the observed values of total radiation. There is a formula for the computation of the instantaneous value of the radiation balance: $B'' = Q(1-A)-E_{ef}$ (2). A denotes the albedo (reflection factor) of the basement area (podstilayushchaya poverkhnost'), E_{ef} the effective radiation of the same. Table 1

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shows the calculation results with the measured values, i.e.: of E_{ef}, furthermore E''_{ef}-values detected by means of the diagram of Kovaleva, and B"-values computed by means of the formula (2). In the table measured B-values and the results of their comparison with the computed results (B - B") are given as well. Finally the table contains the values of the radiation balance B' computed according to the later suggested method. Since the determination of the value B" by the nomograph of Kovaleva can scarcely be recommended, the author uses a simplified method of prolongation on the observation series. He derives the formula $B = kQ + b$ (3) from the formula (2) and tries to evaluate the values k and b for points in various geographical zones, i.e. on the strength of Q and B. For this purpose corresponding B- and Q-values were entered into a coordinate surface after they were taken from the TM-12 tables (Fig 1). For the purpose of demonstration a diagram is given in figure 1 on the strength of observations made in Odessa. There are 3 figures, 2 tables, and 3 references, 2 of which are Soviet.

D'YACHENKO, L.N.

PHASE I BOOK EXPLOITATION SOV/5957

Barashkova, Yelena Pavlovna, Vasiliy Leonidovich Gayevskiy, Lyudmila Nikolayevna D'yachenko, Kira Mikhaylovna Lugina, and Zinaida Il'inichna Pivovarova

Radiatsionnyy rezhim territorii SSSR (Radiation Regime of the USSR) Leningrad, Gidrometeoizdat, 1961. 527 p. Errata slip inserted. 1500 copies printed.

Sponsoring Agency: Glavnoye upravleniye gidrometeorologicheskoy sluzhby pri Sovete Ministrov SSSR. Glavnaya geofizicheskaya observatoriya im. A. I. Voyeykova.

Ed.: G. Ya. Rusakova; Tech. Ed.: A. G. Alekseyev.

PURPOSE: This book is intended for meteorologists and geophysicists.

COVERAGE: This is a survey and analysis of the radiation regime of the USSR. The authors investigate the relationship between

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the various components of the radiation balance and individual meteorological elements, and analyze the time and space distribution of basic factors in the radiation regime. The study is based on data concerning the total, diffuse, direct, reflected, and effective radiation, the radiation balance, and the albedo which were obtained from observations by meteorological stations of the Hydrometeorological Service of the USSR. Observations from 98 stations (none located above an altitude of 650 m) were used. The following characteristics were considered for each of the above elements: distribution by territory; intensity; radiation rates by day, month, and year; and presence and absence of cloud cover. Most of these observations were made between 1954 and 1959 and, except at stations in Siberia and the [Soviet] Far East, were conducted for periods of not less than four years. Thermoelectric actinometers, balance meters, and pyranometers were used. A map and a comprehensive list giving the location and a description of the surrounding countryside for all actinometric stations at which observations were made are included. The

data used in the study are presented in 35 tables in the two appendixes following the text. The following members of the Main Geophysical Observatory participated in the preparation of the book: V. P. Agapova, G. S. Barkan, M. A. Yemel'yanovich, L. I. Kuz'mina, V. B. Leont'yeva, L. V. Ostrozhinskaya, V. G. Poddubnyak, L. M. Rudikov, G. I. Ryumina, Z. Ya. Subbotina, N. K. Titova, and L. T. Khalezova. There are 145 references: 118 Soviet, 15 German, 9 English, and 3 French.

TABLE OF CONTENTS [Abridged]:

AVAILABLE: Library of Congress

SUBJECT: Geophysics

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MM/rtk/tem
6-1-62

D'YACHENKO, L.N.

Comparing some methods for long-wave radiation measurement. Trudy GGO no.109:96-99 '61. (MIRA 14:5)
(Solar radiation)

ACCESSION NR: AT4040733 S/2531/64/000/152/0126/0141

AUTHOR: D'yachenko, L. N.

TITLE: Distribution of the effective radiation throughout the territory of the SSSR

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy*, no. 152, 1964. Issledovaniya radiatsionny*kh protsessov (Investigations of radiation processes), 126-141

TOPIC TAGS: meteorology, solar radiation, insolation, radiation distribution, actinometry, radiation balance

ABSTRACT: Charts are given which show the annual and monthly distribution of the effective solar radiation over the territory of the Soviet Union. These charts were plotted on the basis of experimental data from 181 stations, but are compared with similar charts compiled from calculated data. The accuracy in the determination of long-wave radiation is affected, not only by errors introduced by the so-called "difference" method, but also by errors in the measurement of the radiance balance using the thermoelectric balance-meter. It has been demonstrated that the sensitivity of the balance-meter to long-wave radiation is approximately 20% less than its sensitivity to short-wave radiation. Unlike all previous works in this field, the author has therefore introduced the required transition factor correction in his computations. On all the charts given in the work, effective radiation isolines are shown plotted

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ACCESSION NR: AT4040733

according to both measured and calculated data. In the plotting and analysis of the charts the mean values of effective radiation for many years were considered, as well as the territorial distribution of air temperature, amount of precipitation, number of days with precipitation and solar radiation sums. Maps of mean cloudiness were also used. Rather good agreement was obtained between calculated and experimental data. An analysis of the annual distribution chart, which has isolines every 10 kcal/cm^2 . yr., shows that the entire territory of the Soviet Union is characterized by a monotonous decrease in effective radiation as latitude increases. The smallest annual sums are on the order of 20 kcal/cm^2 · year. The maximum annual sums of Eeff are observed in Central Asia (in the sandy Karakum region of the Karabil' Plateau), reaching amplitudes on the order of 70 kcal/cm^2 . year. On the elevated areas (Central-Russia, Privolga) and in the mountains (Ural Range) the isolines bend to the South. This is partially explained by the lowering of the temperature as the elevation increases and by the increase in cloudiness. In the Kurin depression an increase in E_{eff} is observed in contrast to adjacent mountanious regions. This is caused by the presenc of high temperatures, low cloud formation during the entire year and negligible precipitation (about 200 mm). In the Kolkhid depression the increase in E_{eff} is far less clearly expressed, the explanation apparently lying in the presence of abundant cloud formation. Maximum value

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ACCESSION NR: AT4040733

for E_{eff} in the Asiatic Territory of the Soviet Union, except for Central Asia, are observed in the Amur basin and in the region of Lake Khasan, exceeding 40 kcal/cm^2 · year. On the monthly E_{eff} distribution charts, the isolines are drawn every 1 kcal/cm^2 · month. Their analysis shows that during the winter the amplitude of the monthly sum values of effective radiation varies from 1 kcal/cm^2 · month in the North to 4 kcal/cm^2 · month in the South. In Central Asia and in the region of the Karakum this amplitude reaches values in excess of 3 kcal/cm^2 · month in December and January and 4 kcal/cm^2 · month in February. The same monthly sums also occur in the Far East. In the Northern and Central portions of the SSSR the effective radiation field is extremely indistinct. The monthly sums of E_{eff} fluctuate around a value of 1 kcal/cm^2 · month. In the Caucasus, the Kurin Valley is well defined, with the value there exceeding 3 kcal/cm^2 · month. In the spring, as the flow of heat increases, a rise in effective radiation is observed. In the warm period (June, July, August) the monthly sums of effective radiation attain their yearly maxima, reaching values in excess of 8 kcal/cm^2 · month in the Southern sections of Central Asia (the region of the Soviet Union with the highest temperatures and negligible cloud activity). Orig. art. has: 13 figures.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya, Leningrad. (Main Geophysical Observatory)

SUBMITTED: 00 DATE SEL: 15Jul64 ENCL: 00

SUB CODE: ES NO REF SOV: 010 OTHER: 000

Card 3/3

L 3869-66 EWT(1) GW
ACCESSION NR: AT5025241 UR/2531/65/000/170/0192/0201

AUTHOR: D'yachenko, L. N.; Kondrat'yev, K. Ya.

TITLE: Distribution of the long-wave balance of the atmosphere around the earth

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 170, 1965. Issledovaniye radiatsionnykh protsessov v atmosfere (Investigation of radiation processes in the atmosphere), 192-201

TOPIC TAGS: cartography, atmospheric convection, atmospheric thermodynamics, earth radiation

ABSTRACT: The long-wave balance of the atmosphere is defined as the difference between the effective radiation at the surface of the earth and the departing radiation at the upper boundary of the atmosphere. This characteristic is calculated and maps are plotted for the monthly and annual distribution of the long-wave balance of the atmosphere for the entire globe. In making the maps, data from 258 points uniformly distributed about the surface of the earth were used. 163 of these stations were on dry land and 95 were on the sea. The regions above 80° N latitude and below 70° S latitude and high-altitude regions were not taken into consideration due to

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ACCESSION NR: AT5025241

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lack of data. The total area covered by the maps was 460.1 km^2. An analysis of the maps for annual totals of the long-wave balance of the atmosphere shows a variation from 100 Kcal/cm^2 a year in the polar latitudes to 160 Kcal/cm^2 a year in the equatorial latitudes. The isolines are directed in most cases along the lines of latitude. Breaks in the isolines at the land-sea boundaries indicate horizontal nonuniformities in the temperature field. An analysis of the monthly maps for the long-wave balance of the atmosphere shows the highest absolute values over the oceans in the equatorial region. In July the maximum heat flux is shifted somewhat to the north of the equator, and in January the maximum is slightly south of the equator. The maximum is more than 12 Kcal/cm^2 per month (more than 13 Kcal/cm^2 per month over the Pacific Ocean). The effective surface radiation apparently has little effect on the heat flux into the atmosphere over the oceans. Over the continents on the other hand the effective surface radiation is the basic factor which determines the long-wave balance of the atmosphere. It is pointed out that the maps given in this paper are extremely sketchy due to the limited number of stations and the lack of direct measurements of the long-wave balance of the atmosphere to serve as a control. Orig. art. has: 5 figures, 1 table.

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory)

SUBMITTED: 00 ENCL: 00 SUB CODE: ES 44,55

NO REF SOV: 002 OTHER: 000

Card 2/2

D'YACHENKO, L.P.

Making control profiles of vertical mine shaft guides and walls. Bezop. truda v prom. 8 no.12:54 D '64. (MIRA 18:3)

1. Gornotekhnicheskiy inspektor-marksheyder Upravleniya Vostochno-Kazakhstanskogo okruga Gosudarstvennogo komiteta pri Sovete Ministrov Kazakhskoy SSR po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]

MILOVIDOV, A., polkovnik, kand. filosofskikh nauk; D[illegible], K., podpolkovnik, kand. pedagogicheskikh nauk

Ideological weapons in war. Komm. vooruzh. sil 5 no.2:69-72 Ja '65. (MIRA 18:3)

D'YACHENKO, I.

Stock and Stockbreeding - Sakhalin

Progress of stock breeders on the "Krasnyi Sakhalinets" Collective Farm. Kolkh. proizv. 12, no. 3, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

TUCHKOV, V. (g.Rostov-na-Donu); D'YACHENKO, M. (g.Rostov-na-Donu)

Truck gardeners prepare for spring. Sov.profsoiuzy 4 no.4:75 Ap '56.
(Vegetable gardening) (MLRA 9:7)

D'YACHENKO, M.; ZHDANKO, O. (Rostov-na-Donu)

New features. Fin. SSSR 22 no.4:53-62 Ap '61. (MIRA 14:4)
(Rostov-on-Don--Savings banks)
(Socialist competition)

D'YACHENKO, M., podpolkovnik, kand. pedagogicheskikh nauk

Psychological conditions for strengthening military discipline.
Komm. Vooruzh. Sil 4 no.12:46-51 Je '64. (MIRA 17:9)

DYACHENKO, M.G.

Experimental data on the permeability of the cornea. Oft. zhur. 15 no. 6:371-375 '60. (MIRA 13:10)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. N.N. Zayko) Odesskogo meditsinskogo instituta im. N.I. Pirogova.
(CORNEA) (PHOSPHORUS--ISOTOPES)

OLEFIRENKO, V.; D'YACHENKO, M.; KACHAN, L.; BROVIN, S. (Gor'kiy); SOKOLOV, A. (Sverdlovsk); LYUBARSKIY, S. (g.Odessa); KARAS', P. (g.Odessa); BAKAY, P.

Letters and correspondence. Sov. profsoiuzy 17 no.23:39-40 D '61. (MIRA 14:12)

1. Predsedatel' Azovskogo gorkoma profsoyuza rabotnikov gosuchrezhdeniy (for Olefirenko). 2. Instruktor Rostovskogo obkoma profsoyuza rabotnikov gosuchrezhdeniy (for D'yachenko). 3. Neshtatnyy korrespondent zhurnala "Sovetskiye profsoyuzy", g. Vitebsk (for Kachan). 4. Predsedatel' komissii okhrany truda Simferopol'skogo kozhevenno-obuvnogo kombinata imeni Dzerzhinskogo (for Bakay).

(Trade unions) (Community centers)
(Simferopol--Shoe industry--Hygienic aspects)

D'YACHENKO, M., inzh.; SHCHERBAKOVA, A., inzh.

Automatic tire pumping. Avt.transp. 40 no.5:27-28 My '62.
(MIRA 15:5)

1. Donetskiy avtotrest.
(Tires, Rubber) (Air pumps)

NOSOV, V.A., kand.tekhn.nauk; BARASHKOV, S.K.; DYACHENKO, M.A.; SOSENKO, A.P.

Ultrasonic instrument for measuring electrolyte concentration. Avtom.i prib. no.1:56-59 Ja-Mr '62. (MIRA 15:3)

1. Institut avtomatiki Gosplana USSR.
(Ultrasonic testing)

NOSOV, V.A., kand. tekhn. nauk; DYACHENKO, M.A.; SOSENKO, A.P.; MINOVSKIY, A.I.

Ultrasonic meter of alkali concentration. Avtom. i prib. no.4:64-68 O-D '63. (MIRA 16:12)

1. Institut avtomatiki Gosplana UkrSSR.

S/058/63/000/001/010/120
A062/A101

AUTHOR: Dyachenko, M. H.

TITLE: Fast-acting photoelectric spectrometer for the visible and infra-red regions of the spectrum

PERIODICAL: Referativnyy zhurnal, Fizika, no. 1, 1963, 25, abstract 1 A257 ("Pratsi Odes'k. un-tu. Pryrodn. n., Tr. Odessk. un-ta. Yestestv. n." 1961, 151, no. 6, 11 - 14, Ukrainian)

TEXT: In the fast-acting portable spectrometer, designed on the base of the monochromator ДМ -2 (DM-2) with a glass optical system, fast scanning of spectra is effected through a small plane mirror, oscillating in the field of an electromagnet with the frequency 400 c/s, while 800 spectra per second are scanned on the screen of the oscillograph. A photoelectric amplifier ФЭУ-22 (FEU-22) is utilized as a receiver. When scanning the spectral zone 540 - 590 mμ with the indicated frequency, the device resolves the mercury doublet 577, 579 mμ.

[Abstracter's note: Complete translation]

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D'YACHENKO, M., inzh.; ZINOV'YEV, V., inzh.

Technical production base in case of an organization of the technical service on a self-financing basis. Avt. transp. 42 no.8:19-20 Ag '64. (MIRA 17:10)

1. Donetskiy proizvodstvennyy avtotrest "Glavdonbasstroy."

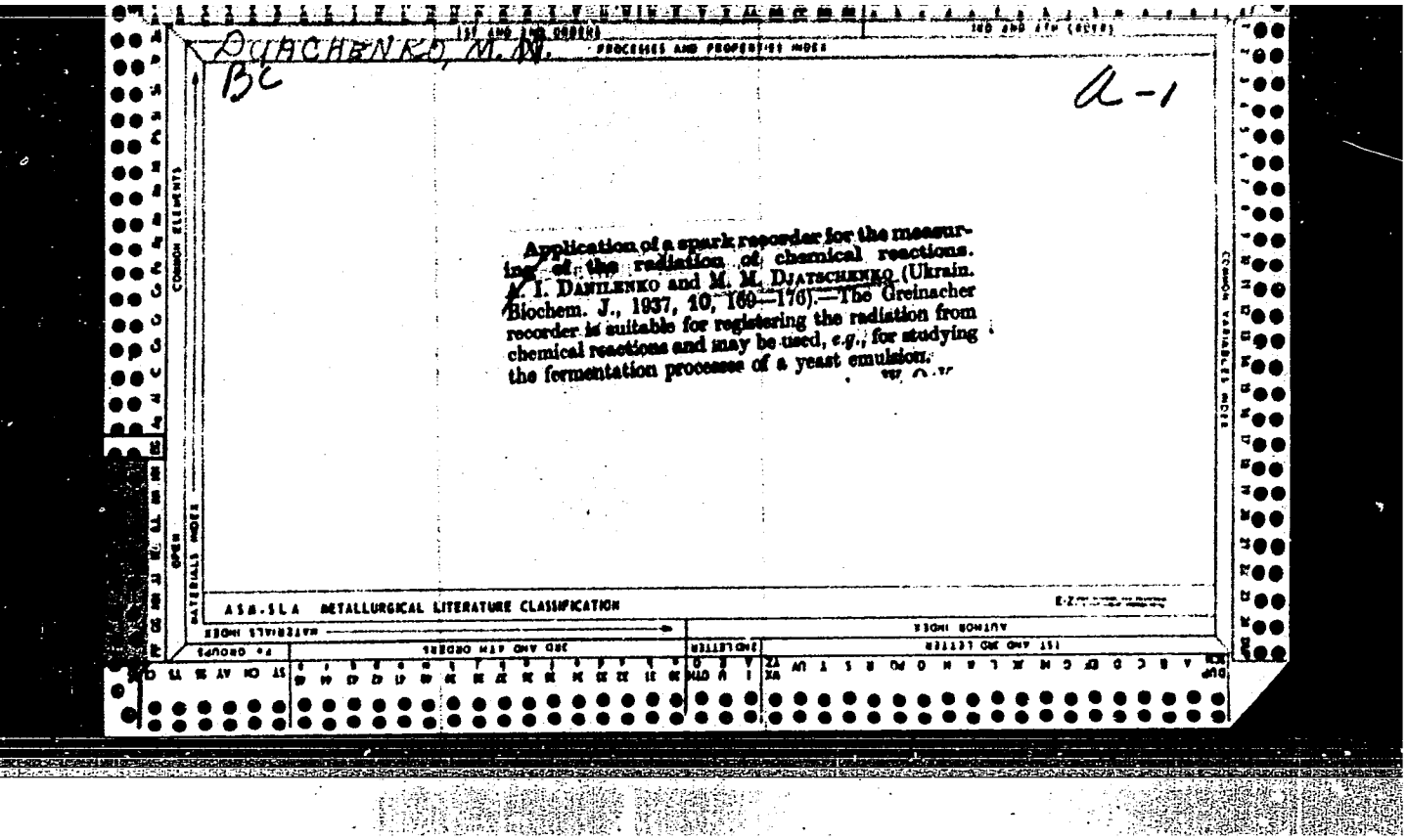
BARABANSHCHIKOV, A.V.; D'YACHENKO, M.I.; ZAPOROZHETS, A.V.; FEDENKO, N.F.

"Psychology (Essays on problems in the training and education of Soviet soldiers)" by G.D.Lukov. Reviewed by A.V.Barabanshchikov and others. Vop. psikhol. 7 no.6:179-182 N-D '61. (MIRA 15:1)
(Psychology, Military) (Lukov, G.D.)

D'YACHENKO, Mikhail Ivanovich, podpolkovnik, kand. pedag. nauk; SHARPILO, P.N., red.; MUKHANOVA, M.D., tekhn. red.

[Individual approach in the training of soldiers]Individual'nyi podkhod v vospitanii voinov. Moskva, Voenizdat, 1962. 117 p. (MIRA 16:3)

(Military education)



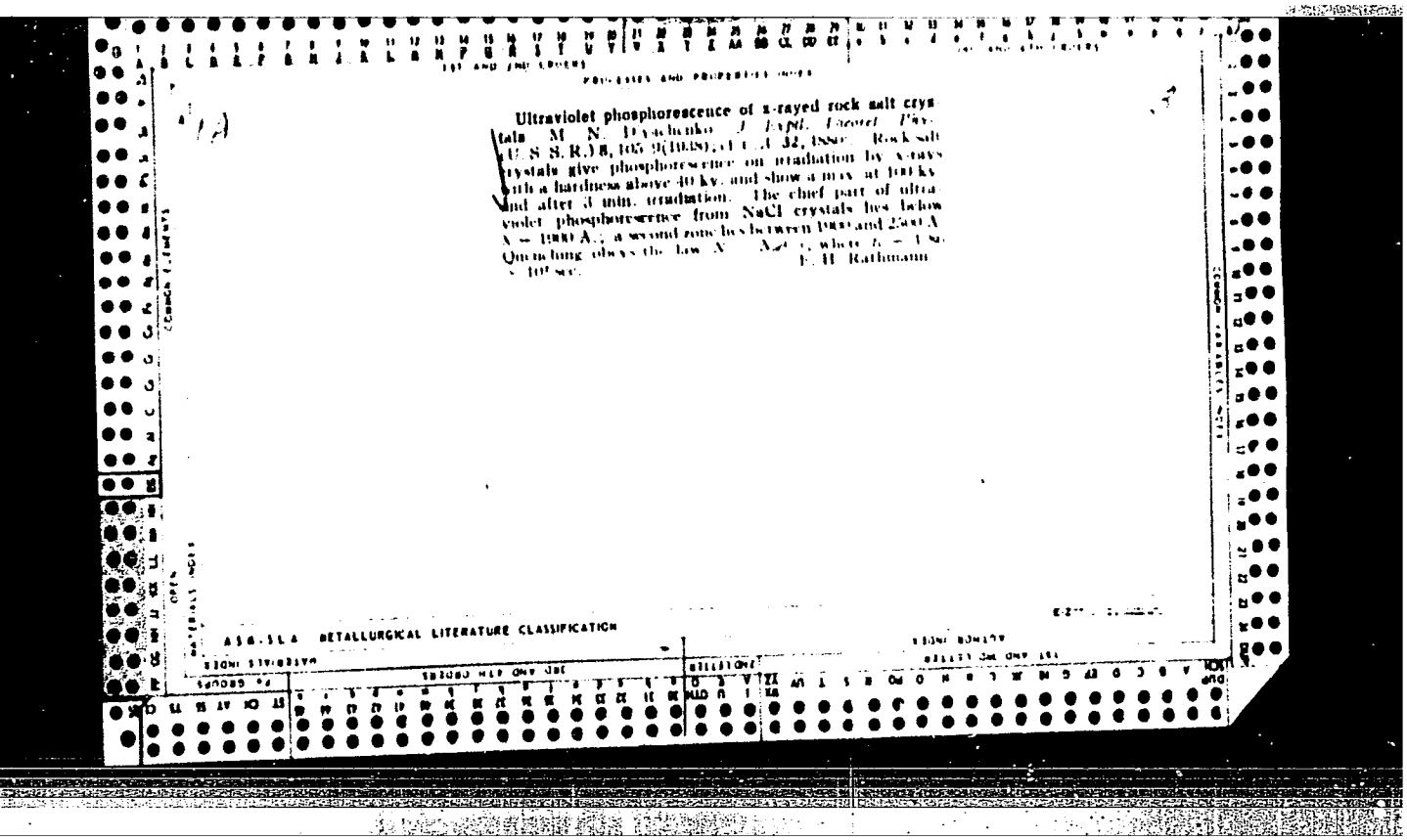
DJATSCHENKO, M. M.

BC

A-1

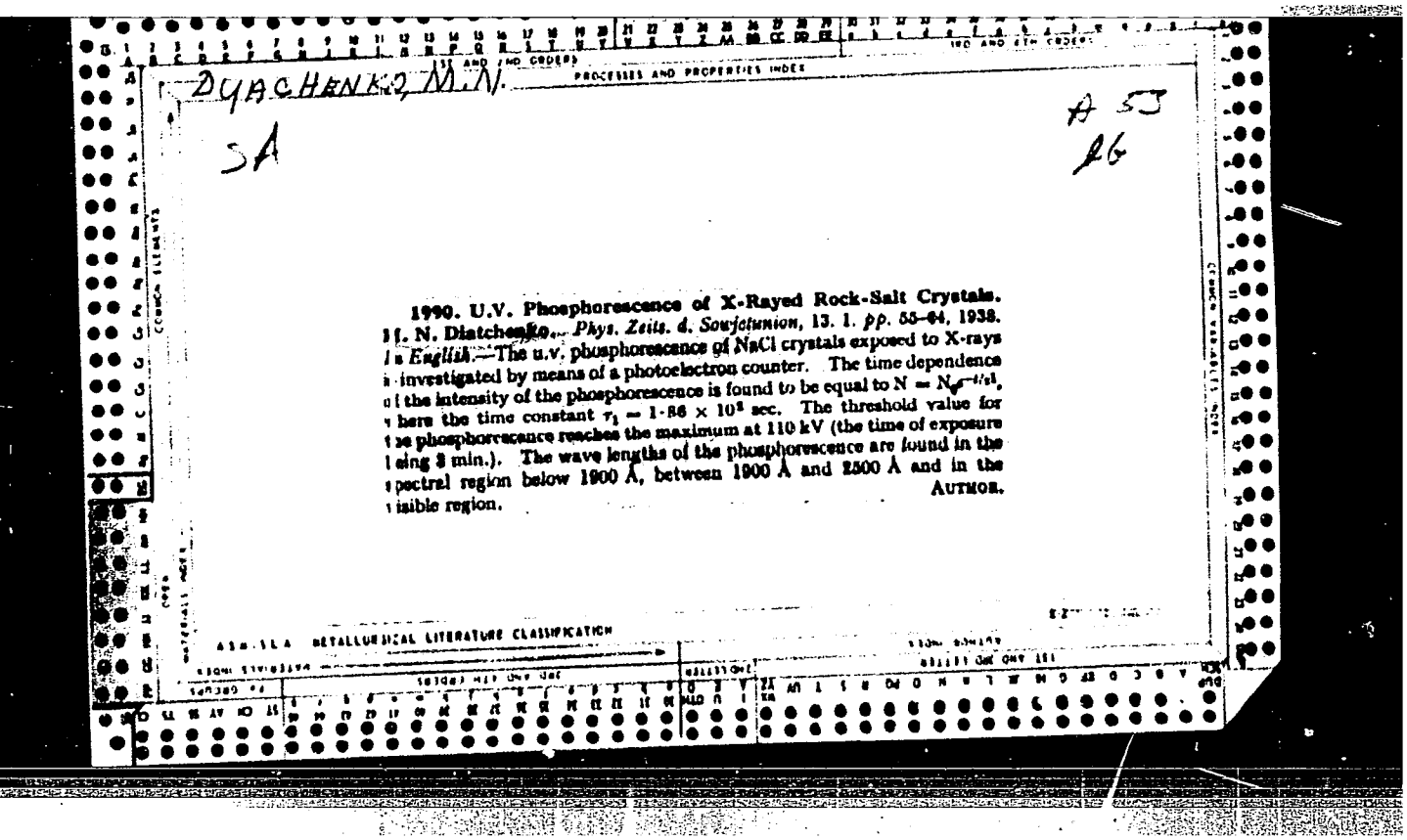
Application of a spark recorder for the measuring of the radiation of chemical reactions. W. I. DANILENKO and M. M. DJATSCHENKO (Ukrain. Biochem. J., 1937, 10, 169—176).—The Greinacher recorder is suitable for registering the radiation from chemical reactions and may be used, *e.g.*, for studying the fermentation processes of a yeast emulsion.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Ultraviolet phosphorescence of x-rayed rock salt crys
tals M N Dyachenko J Exptl Theoret Phys
(U S S R) 8, 105 9(1938), cf C A 32, 1880 Rock salt
crystals give phosphorescence on irradiation by x-rays
with a hardness above 40 kv and show a max at 30 kv
and after 3 min. irradiation. The chief part of ultra
violet phosphorescence from NaCl crystals lies below
$\lambda = 1900$ A.; a second zone lies between 1900 and 2500 A
Quenching obeys the law $A = A_0 e^{-kt}$, where $k = 1.5$
$\times 10^{-2}$ sec. P H Rathmann

A56-5L4 METALLURGICAL LITERATURE CLASSIFICATION



DYACHENKO, M.N.

5A

A 53

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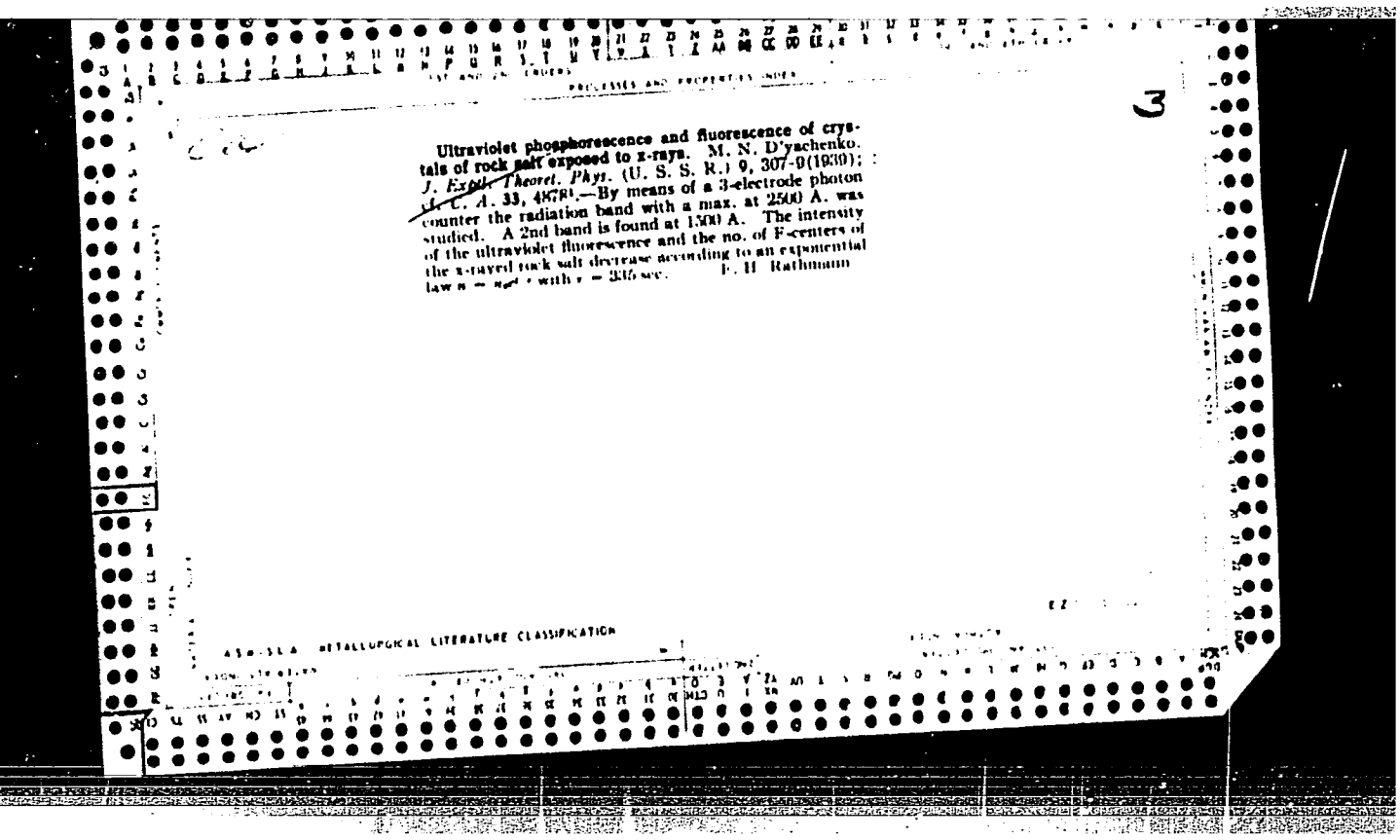
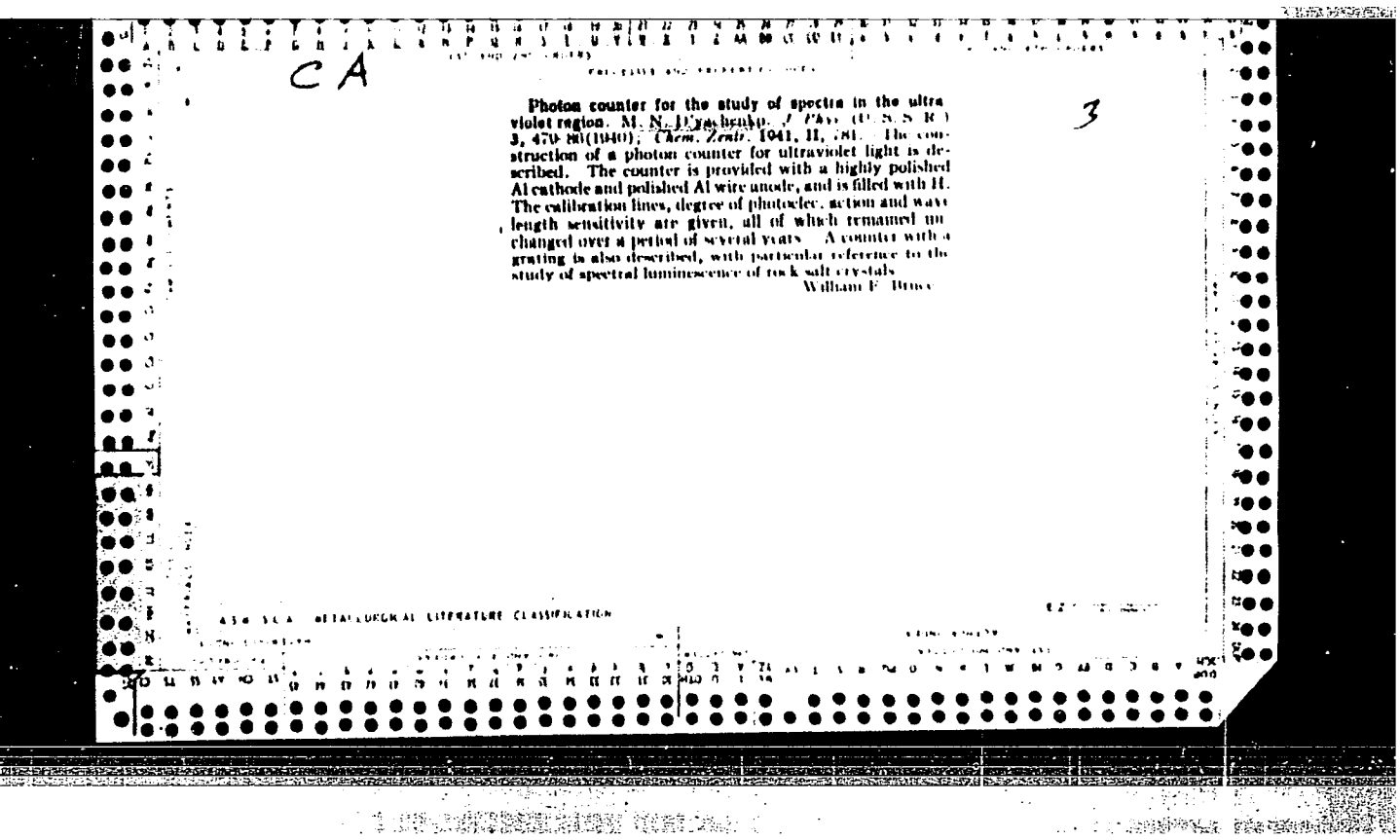
1990. U.V. Phosphorescence of X-Rayed Rock-Salt Crystals. M. N. Diatchenko. *Phys. Zeits. d. Soujetunion*, 13. 1. *pp.* 55–64, 1938. In *English.*—The u.v. phosphorescence of NaCl crystals exposed to X-rays is investigated by means of a photoelectron counter. The time dependence of the intensity of the phosphorescence is found to be equal to $N = N_0 e^{-t/\tau_1}$, where the time constant $\tau_1 = 1{\cdot}86 \times 10^3$ sec. The threshold value for the phosphorescence reaches the maximum at 110 kV (the time of exposure being 3 min.). The wave lengths of the phosphorescence are found in the spectral region below 1900 Å, between 1900 Å and 2500 Å and in the visible region. AUTHOR.

ASM-TLA METALLURGICAL LITERATURE CLASSIFICATION



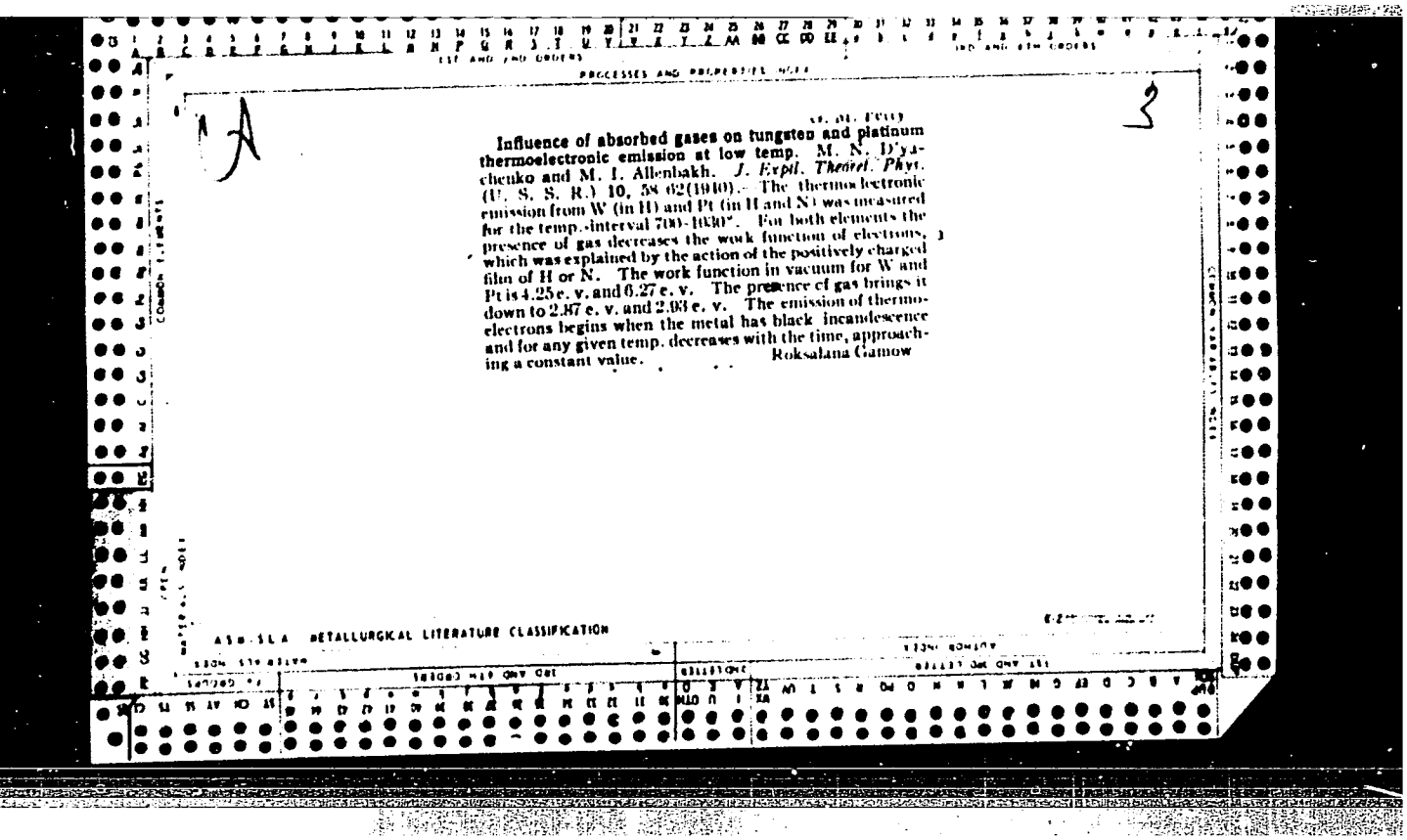
Ultraviolet phosphorescence and fluorescence of crystals of rock salt exposed to x-rays. M. N. D'yachenko. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 9, 307-9(1939); *C. A.* 33, 4878⁸.—By means of a 3-electrode photon counter the radiation band with a max. at 2500 A. was studied. A 2nd band is found at 1300 A. The intensity of the ultraviolet fluorescence and the no. of F-centers of the x-rayed rock salt decrease according to an exponential law $n = n_0 e^{-t/\tau}$ with $\tau = 335$ sec. F. H. Rathmann



CA

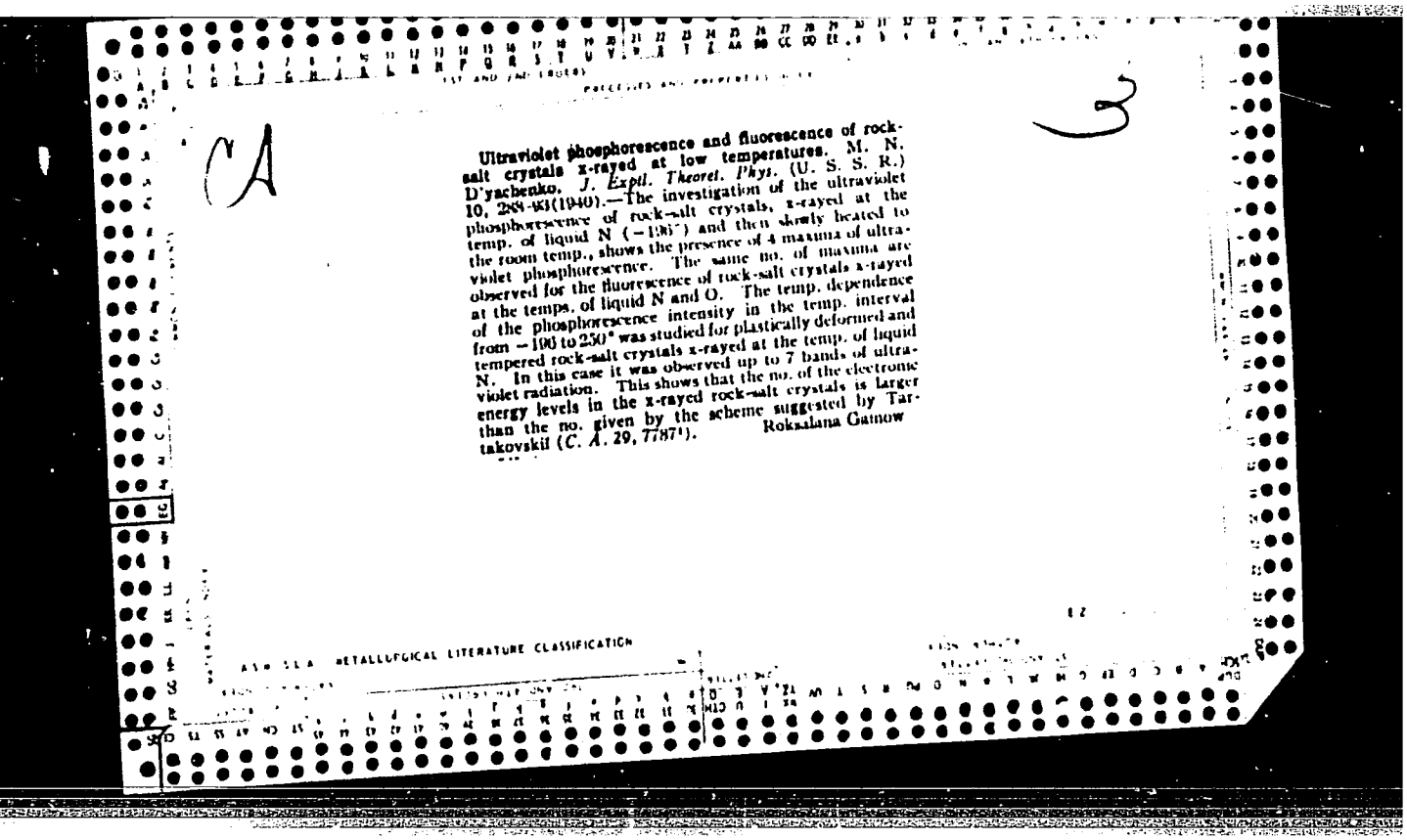
3

Photon counter for the study of spectra in the ultraviolet region. M. N. D'yachenko. *J. Phys.* (U.S.S.R.) 3, 479-80(1940); *Chem. Zentr.* 1941, II, 581. The construction of a photon counter for ultraviolet light is described. The counter is provided with a highly polished Al cathode and polished Al wire anode, and is filled with H. The calibration lines, degree of photoelec. action and wavelength sensitivity are given, all of which remained unchanged over a period of several years. A counter with a grating is also described, with particular reference to the study of spectral luminescence of rock salt crystals.
William F. Bruce



Influence of absorbed gases on tungsten and platinum thermoelectronic emission at low temp. M. N. D'yachenko and M. I. Allenbakh. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 10, 58-62(1940).—The thermoelectronic emission from W (in H) and Pt (in H and N) was measured for the temp.-interval 700-1000°. For both elements the presence of gas decreases the work function of electrons, which was explained by the action of the positively charged film of H or N. The work function in vacuum for W and Pt is 4.25 e. v. and 6.27 e. v. The presence of gas brings it down to 2.87 e. v. and 2.93 e. v. The emission of thermoelectrons begins when the metal has black incandescence and for any given temp. decreases with the time, approaching a constant value.

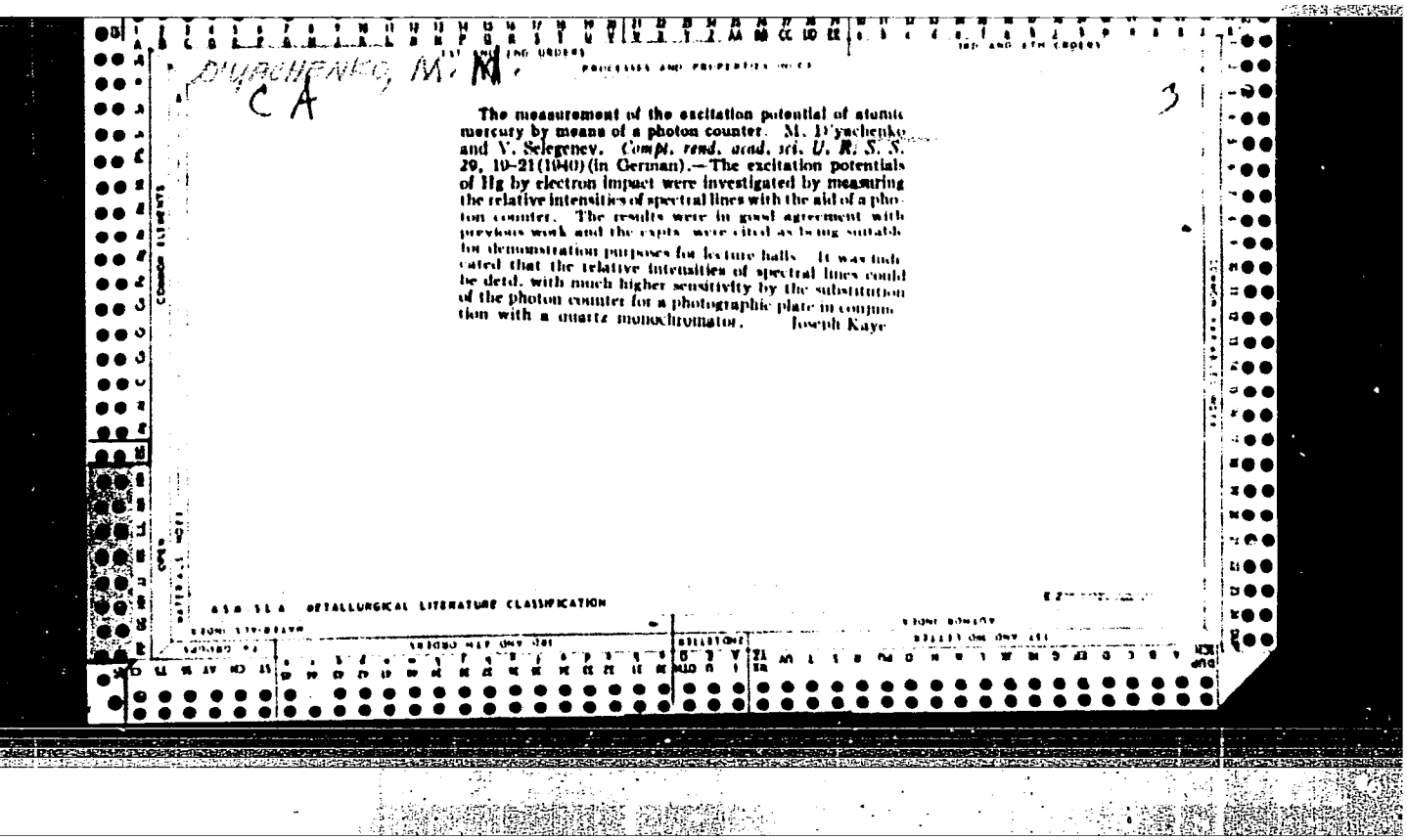
Roksalana Gamow



CA

Ultraviolet phosphorescence and fluorescence of rock-salt crystals x-rayed at low temperatures. M. N. D'yachenko. *J. Expll. Theoret. Phys.* (U. S. S. R.) 10, 288-93(1940).—The investigation of the ultraviolet phosphorescence of rock-salt crystals, x-rayed at the temp. of liquid N (−196°) and then slowly heated to the room temp., shows the presence of 4 maxima of ultraviolet phosphorescence. The same no. of maxima are observed for the fluorescence of rock-salt crystals x-rayed at the temps. of liquid N and O. The temp. dependence of the phosphorescence intensity in the temp. interval from −190 to 250° was studied for plastically deformed and tempered rock-salt crystals x-rayed at the temp. of liquid N. In this case it was observed up to 7 bands of ultraviolet radiation. This shows that the no. of the electronic energy levels in the x-rayed rock-salt crystals is larger than the no. given by the scheme suggested by Tartakovskii (*C. A.* 29, 7787[1]). Roksalana Gamow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



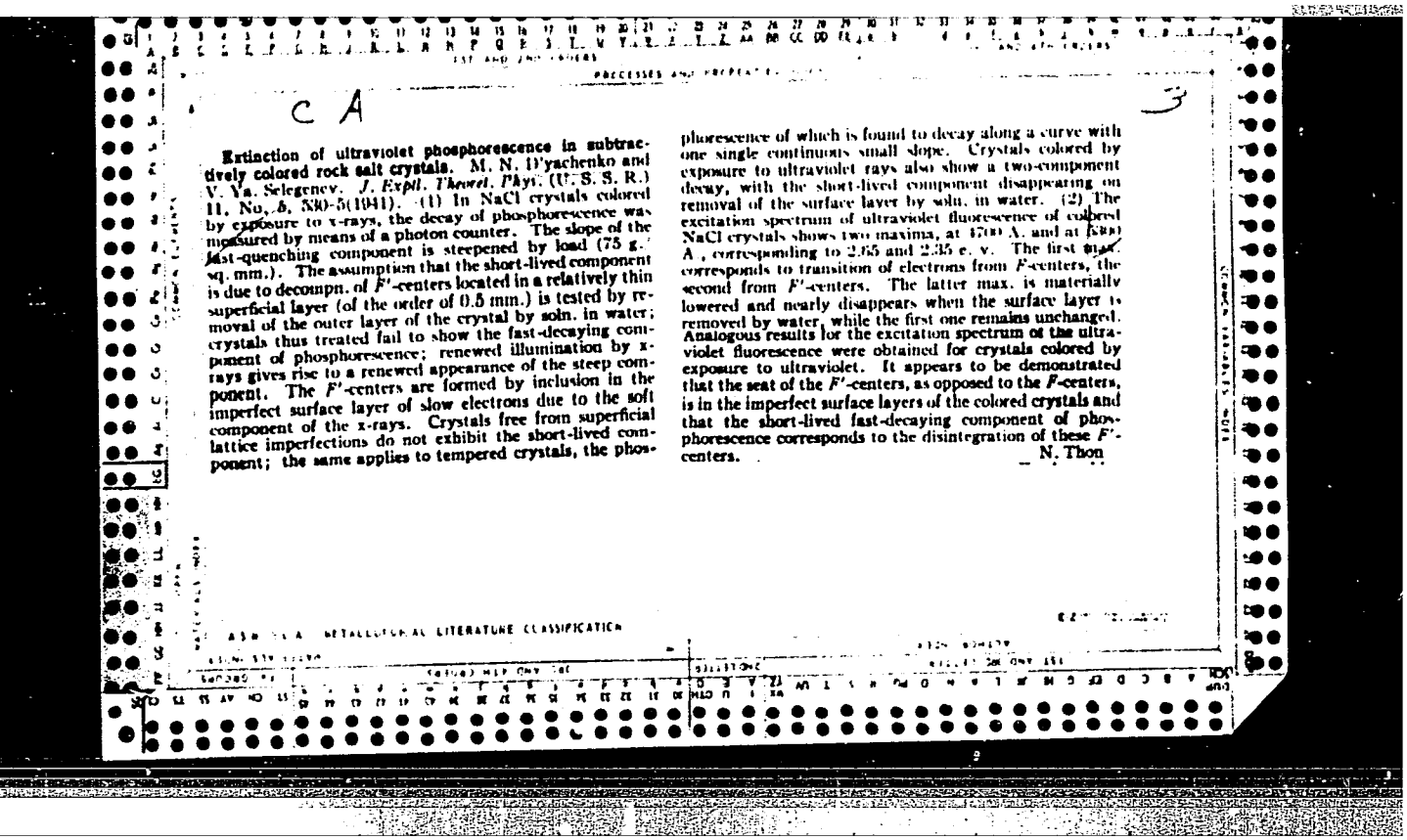
DYACHENKO, M. M.

CA

3

The measurement of the excitation potential of atomic mercury by means of a photon counter. M. Dyachenko and V. Selegenev. *Compt. rend. acad. sci. U. R. S. S.* 29, 19–21 (1940) (in German).—The excitation potentials of Hg by electron impact were investigated by measuring the relative intensities of spectral lines with the aid of a photon counter. The results were in good agreement with previous work and the expts. were cited as being suitable for demonstration purposes for lecture halls. It was indicated that the relative intensities of spectral lines could be detd. with much higher sensitivity by the substitution of the photon counter for a photographic plate in conjunction with a quartz monochromator. Joseph Kaye

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION



C A

3

Extinction of ultraviolet phosphorescence in subtractively colored rock salt crystals. M. N. D'yachenko and V. Ya. Selegenev. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 11, No. 5, 530-5(1941). (1) In NaCl crystals colored by exposure to x-rays, the decay of phosphorescence was measured by means of a photon counter. The slope of the fast-quenching component is steepened by load (75 g./sq. mm.). The assumption that the short-lived component is due to decompn. of *F'*-centers located in a relatively thin superficial layer (of the order of 0.5 mm.) is tested by removal of the outer layer of the crystal by soln. in water; crystals thus treated fail to show the fast-decaying component of phosphorescence; renewed illumination by x-rays gives rise to a renewed appearance of the steep component. The *F'*-centers are formed by inclusion in the imperfect surface layer of slow electrons due to the soft component of the x-rays. Crystals free from superficial lattice imperfections do not exhibit the short-lived component; the same applies to tempered crystals, the phosphorescence of which is found to decay along a curve with one single continuous small slope. Crystals colored by exposure to ultraviolet rays also show a two-component decay, with the short-lived component disappearing on removal of the surface layer by soln. in water. (2) The excitation spectrum of ultraviolet fluorescence of colored NaCl crystals shows two maxima, at 4700 A. and at 5300 A., corresponding to 2.65 and 2.35 e. v. The first max. corresponds to transition of electrons from *F*-centers, the second from *F'*-centers. The latter max. is materially lowered and nearly disappears when the surface layer is removed by water, while the first one remains unchanged. Analogous results for the excitation spectrum of the ultraviolet fluorescence were obtained for crystals colored by exposure to ultraviolet. It appears to be demonstrated that the seat of the *F'*-centers, as opposed to the *F*-centers, is in the imperfect surface layers of the colored crystals and that the short-lived fast-decaying component of phosphorescence corresponds to the disintegration of these *F'*-centers.

N. Thon

USSR/Phys Feb 1947
Phosphorescence
Crystals - Color

"Ultraviolet Phosphorescence of NaCl Crystals Having Subtractive and Additive Coloration at Low Temperatures," M. N. D'yachenko, 10 pp

"Zhur Eksper i Teoret Fiz" Vol XVII, No 2 pp 121-33.

Studied these crystals in temperature range from -196° C to +250° C. In this range nine separate bands of ultraviolet phosphorescence were recorded possessing distinct spectral composition. In crystals with additive coloration temperature dependence of luminescence has smaller number of emission bands compared

PA 57T93

USSR/Phys (Contd) Feb 1947

with crystals having subtractive coloration. Examines observed phenomena from standpoint of energy levels in colored crystals. Gives scheme taking account of new energy levels in X-rayed crystals of NaCl.

57T93

D'YACHENKO, M. N.

USSR/Phys Feb 1947
Phosphorescence
Crystals - Color

"Electron Transitions and Decay of the Ultraviolet Luminescence of NaCl Crystals With Subtractive and Additive Coloration," M. N. D'yachenko, Ukrainian Cent Roentgen-Radiol and Oncological Inst, 5 pp

"Zhur Eksper i Teoret Fiz" Vol XVII, No 2, pp 154-9.

Decay of ultraviolet phosphorescence of NaCl crystals with subtractive and additive coloration obeys exponential law. In deformed crystals phosphorescence radiation consists of rapidly and slowly decaying components. In radiation by visible light, decay, in contrast to phosphorescence, has only one component, the inclination of which is equal to that of the rapidly decaying component of phosphorescence, while its emission energy is considerably greater than that of each of the phosphorescence components.

57T91

D'YACHENKO, M. N.

57T91

D'YACHENKO, M. N.

USSR/Physics - X-Ray Dosimeters, Photocells Apr 52

"Investigating the Sensitivity of Silver Sulfide Photocells to X-Rays and Their Applicability to Dosimetery," I.M. Fglyak, M.N. D'yachenko, Chair of Phys, Khar'kov Inst of Railroad Engineers, and Physics Lab, Ukrainian X-Ray and Oncol Inst

"Zhur Tekh Fiz" Vol XXII, No 4, pp 670-676

Improved silver sulfide photocells type FESS-U (cf. I.R. Potapenko, "Zhur Tekh Fiz" 18, 11, 1948; V.Ye. Kosenko and Ye.G. Mislkyu, "Zhur Tekh Fiz" 18,11, 1948), mass-produced by Inst of Phys, Acad Sci Ukrainian SSR, proved to be very sensible to

216T102

X-rays. Investigation is described in detail and the applicability of these photoelements to dosimetry shown. Received 1 Aug 51.

216T102

D'YACHENKO, M.N., dotsent; VARSHAVSKIY, B.M., dotsent.

Protective containers for work with radioactive materials. Vest. rent i rad. no.6:76-79 N-D '55. (MLRA 9:4)

1. Iz Ukrainskogo rentgeno-radiologicheskogo i onkologicheskogo instituta (dir.-dotsent Ye.A. Bazlov)
(RADIOTHERAPY, appar. and instruments
protective containers for radioactive materials)

D'yachenko, M.N.

SUBJECT: USSR/Luminescence

48-4-35/48

AUTHOR: D'yachenko M.N.

TITLE: Luminescence and Distribution of Capture Levels in Alkali-Haloid Crystals with Haloid Excess (Lyuminestsenstiya i raspredeleniye urovney zakhvata v shchelochno-galbidnykh kristallakh s izbytkom galoidov)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Fizicheskaya, 1957, Vol 21, #4, pp 570-579 (USSR)

ABSTRACT: This investigation dealt with capture levels in NaCl colored crystals activated with haloids. Experiments have shown the following results:

1. In NaCl crystals activated with Cu, Ni and Ag, a considerable increase of ultraviolet luminescent intensity is observed. The number of peaks in the temperature range from 113 to 400°K increases and they become weaker in the temperature range from 400 to 500°K in comparison with non-activated crystals. Several very intensive peaks of visual emission in temperature range from 113 to 500°K are also observed in these crystals.

Card 1/3

TITLE: Luminescence and Distribution and Capture Levels in Alkali-Haloid Crystals with Haloid Excess (Lyuminestsenstiya i raspredeleniye urovney zakhvata v shchelochno-galoidnykh kristallakh s izbytkom galoidov)

48-4-35/48

2. In NaCl crystals colored in sodium vapors, many peaks of ultraviolet luminescence of comparatively moderate intensity are observed in the temperature range from 113 to 400°K. In the range from 400 to 500°K peaks are absent.

3. Many maxima of ultraviolet luminescence are observed in natural NaCl crystals annealed at 750°C throughout the whole temperature range from 113 to 500°K. The same number of luminescence peaks were discovered also in the visual region as in NaCl-Cu; NaCl-Ni and NaCl-Ag crystallophosphors, but of somewhat lower intensity.

4. A considerable increase of the number of peaks and their intensities is observed in NaCl crystals activated with Cl, Br and especially J. Capture levels increase throughout the whole temperature range from 113 to 500°K for the case of J.

5. The excitation of annealed and not annealed NaCl crystals by beta-particles does not lead to an increase of peaks in visual emission in comparison with X-ray excitation. Some increase of the number of peaks is observed in the ultraviolet region.

Card 2/3

TITLE: Luminescence and Distribution and Capture Levels in Alkali-Haloid Crystals with Haloid Excess (Lyuminestsenstiya i raspredeleniye urovney zakhvata v shchelochno-galoidnykh kristallakh s izbytkom galoidov) 48-4-35/48

6. New levels in the range from 113 to 500°K arise in the case of bombarding NaCl natural crystals with neutrons.

The report was followed by a short discussion. The article contains 10 graphs. No references are cited.

INSTITUTION: Khar'kov Institute of Medical Radiology; Khar'kov Institute of Railroad Transport Engineers im. Kirov

PRESENTED BY:

SUBMITTED: No date indicated

AVAILABLE: At the Library of Congress.

Card 3/3

D'YACHENKO, M.N.

New methods of dosimetry of ionizing radiations. Med.rad. 3 no.4: 75-78 Jl-Ag '58. (MIRA 12:3)

1. Iz Fiziko-tekhnicheskogo otdela Khar'kovskogo instituta meditsinskoy radiologii.
(RADIATION COUNTERS,
scintillation counter (Rus))

D'YACHENKO, M.N.

Effect of high-temperature firing on the luminescence and coloration of quartz crystals subjected to the action of X-rays. Opt. i spektr. 8 no.4:531-536 Ap '60. (MIRA 13:11)
(Quartz crystals) (Luminescence)

D'YACHENKO, M.N., kand.fiz.-matem.nauk, dotsent

Luminescence and distribution of energy levels in annealed and unannealed alkali halide crystals excited with X rays and β particles. Trudy KHIIT no.41:74-83 '61. (MIRA 15:2)
(Luminescence)
(Crystals--Spectra)

L 16177-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AT3002382 S/2930/62/000/000/0213/0224

AUTHOR: D'yachenko, M. N. (Kharkov)

TITLE: Cylindrical and flat proportional counters, their detection methods and use

SOURCE: K voprosam ranney diagnostiki ostroy luchevoy bolezni; sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 213-224

TOPIC TAGS: cylindrical proportional counter, flat proportional counter, gas amplification factor, alpha-particle , r-meter

ABSTRACT: The construction, operating principles, and use of cylindrical proportional counters and flat proportional counters are discussed with emphasis on the gas amplification factor. Proportional counters have a high gas amplification factor and are used to detect alpha-particles and protons and to determine their energy spectra. Cylindrical flat proportional counters have large active surfaces and small backgrounds (2-3 impulses/hr) and can be used to determine extremely small quantities of radium and other radioactive substances in the organism by measuring the alpha-activity of the blood and

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L 16177-63

ACCESSION NR: AT3002382

urine. Similar devices can be used to measure weak concentrations of alpha-active substances found in atmospheric air and to measure other radioactivity. These counters, with boron layers on the inside plane surfaces, work well as neutron detectors and dosimeters. Orig. art. has: 5 figures, 1 formula.

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 28May63 ENCL: 00

SUB CODE: AM NO REF SOV: 009 OTHER: 000

Card 2/2

L 16516-63 EWT(m)/BDS AFFTC/ASD

ACCESSION NR: AT3002383 S/2930/62/000/000/0225/0230

AUTHOR: D'yachenko, M. N.; Puzinovskiy, S. K. (Kharkov) 55

TITLE: Investigation of the dependence of dosimeter readings on hardness 19

SOURCE: K voprosam ranney diagnostiki ostroy luchevoy bolezni; sbornik nauchnykh rabot. Kiev, Medgiz USSR, 1962, 225-230.

TOPIC TAGS: energy dependence, hard radiation, dosimeter, ionizing dosimeter, photoelectric dosimeter, luminescent dosimeter, radiometer

ABSTRACT: In certain ranges of hard radiation, radiometers have to be calibrated according to r-meters, making it necessary to know the energy dependence of the more widely used dosimeters. This study investigates the energy dependence of the following dosimeters: capacitor (portable) dosimeter, universal GRI dosimeter, RIP r-meter, photoelectric dosimeter, and a luminescent dosimeter. A Kyustner dosimeter was used to calibrate the other dosimeters because its readings do not depend on hardness in the 60 to 200 kV range. It was found that the readings of all the dosimeters examined depend on

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L 16516-63

ACCESSION NR: AT3002383

hardness. The luminescent r-meter with a stilbene crystal depends least on hardness. The energy dependence readings for the photoelectric silver sulfide dosimeter does not exceed the dependence of ionizing dosimeters. Thus, there is no basis to consider the widely used ionizing instruments as being less energy dependent than the semiconductor or luminescent ones. In using various dosimeter types energy dependence readings should be made to avoid errors. Orig. art. has: 4 figures.

ASSOCIATION: None

SUBMITTED: 00 DATE ACQ: 28May63 ENCL: 00

SUB CODE: AM NO REF SOV: 007 OTHER: 000

Card 2/2

D'YACHENKO, M.Ya. (Smolensk, ul. Frunze, d.8, kv.16); ROGOZHINA, N.I.

Epicondylotenonitis caused by superstress. Ortop. travm. i protez. 24 no.5:63-64 My '63. (MIRA 17:9)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav.- prof. S.M. Nekrasov) Smolenskogo meditsinskogo instituta.

DYACHENKO, M.Ya

DYACHENKO, M.Ya.

Equation of motion for a hydrodynamic turbine coupling with automatically regulated slip. Dop. AN URSR no.2:118-122 '55.
(MLRA 8:11)

1. Institut girnichoi spravi Akademii nauk URSR. Predstaviv diysniy chlen Akademii nauk URSR V.S.Pak
(Hydraulic turbines)

DYACHENKO, M.Ya

DYACHENKO, M.Ya.

Scientific conference on the improvement of methods of subsurface mining of coal and ore. Visnyk AN URSR 26 no.8:59-63 Ag'55.
(MLRA 8:11)
(Ukraine--Coal mines and mining) (Ukraine--Mining Engineering)

D'YACHENKO, M.Ya., inzhener.

Selecting speed regulators for the feed system of automatic coal cutters and cutter-loaders. Sbor.trud.Inst.gor.dela AN URSR no.3:74-79 '56. (MLRA 9:8)
(Coal mining machinery) (Automatic control)

D'YACHENKO, M. YA.

112-1-872

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957, Nr 1, p. 140 (USSR)

AUTHOR: D'yachenko, M. Ya.

TITLE: Problem of Selecting Load-Control Connection Diagrams of Coal-Cutting Electric Machine Drives (K voprosu o vybore skhem regulyatorov nagruzki elektrodvigatelya ugledobyvayushchikh mashin)

PERIODICAL: Sbornik tr. in-ta gorn. dela AN SSSR, 1956, Nr 3(12), pp. 80-85

ABSTRACT: In the field of electric drives of coal cutters and coal combines with induction squirrel-cage motors there exists a large number of systems of automatic load control by way of action upon the magnitude of the feeding. At the same time inaccurate interpretations and conclusions have occurred as concerns the classification of structural schemes of the regulators, their evaluations, and the requirements presented. In order to elucidate this problem, existing control systems (or those proposed by some authors) of coal mining machines are compiled, of both static and astatic action, which are divided into two basic groups: a) schemes of indirect control, and b) schemes of direct control. The analysis of the equation of motion for all

Card 1/2

Problem of Selecting Load-Control Connection Diagrams of Coal-Cutting Electric Machine Drives (Cont.)

these systems, written in a non-dimensional form, permits making the following basic conclusions: 1) the regulators of direct action together with the static ones of indirect action secure the stable performance of the electric motor; 2) under heavy overloads of continuous action, the control system should prevent the stopping of the motor and lead it out in the shortest period of time into the stable part of its mechanical characteristic by a corresponding change of the feed speed; 3) it is desirable that the action of the component parts of the system of the regulator circuit upon the control unit of the reducing gear of the feed should occur without interruption and in proportion to the disturbing load. L.B.G

Card 2/2

D'YACHENKO, M.Ya., inzhener.

Selecting sensitive elements for load control systems of electric motors used in coal cutters and cutter-loader machines. Sbor. trud.Inst.gor.dela AN URSR no.3:86-90 '56. (MLRA 9:8)
(Servomechanisms) (Coal mining machinery-Electric driving)

DYACHENKO, M.Ya.

Equation of motion of a coal cutter of toothed chain type having continuous cable feed. Dop. AN URSR no.2:116-120 '57. (MLRA 10:5)

1. Institut girnichoi spravi im. M.M. Fedorova AN URSR. Predstaviv akademik AN URSR V.S. Pak.
(Motion)

Dyachenko, M. Ya.

AUTHOR: Dyachenko, M.Ya.

21-4-3/24

TITLE: On the Choice of Regulating Parameter of Feed in Automatic Coal Cutters with the Chain Cutting Tool and Cable Feed (Do pytannya pro vybir rehulyuyuchoho parametra podachi v avtomatyzovanykh vuhledobuvnykh mashynakh z lantsyuhovym rizhuchym orhanom ta kanatnoyu podacheyu)

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1957, #4, pp 331-333 (USSR)

ABSTRACT: During the past 25 years, experiments with coal cutters with automatic change of cable winding speed did not yield any positive results under mine conditions both in the USSR and abroad, and no automatic coal cutter has found practical application.

The author has shown (3) that the use of cable winding speed or cutting chain speed as regulating parameters for coal cutters does not ensure the stable operation of their electric motors, and that stoppages are not prevented.

If the elongation of the feed cable is chosen as a regulating parameter, the regulator does not cease to operate when the feed

Card 1/2

TITLE: On the Choice of Regulating Parameter of Feed in Automatic Coal Cutters with the Chain Cutting Tool and Cable Feed (Do pytannya pro vybir rehulyuyuchoho parametra podachi v avtomatyzovanykh vuhledobuvnykh mashynakh z lantsyuhovym rizhuchym orhanom ta kanatnoyu podacheyu) 21-4-3/24

drum is disconnected; it reduces the load on the electric motor to the pre-regulated value ensuring thereby the stable operation and eliminating the possibility of stoppages throughout the entire range of load variations.

There are 3 references, all Slavic.

INSTITUTION: Institute of Mining Engineering of the Ukrainian Academy of Sciences.

PRESENTED BY: Pak, V.S., Member of the Ukrainian Academy of Sciences

SUBMITTED: 25 August 1956

AVAILABLE: At the Library of Congress

Card 2/2

D'YACHENKO, M. YA.

AUTHOR: D'yachenko (Dyachenko), M. Ya. 21-1-2/26

TITLE: Equation of Motion of Coal-Mining Machine With Automatic Control of Lengthening of the Feeding Rope (Uravneniye dvizheniya ugledobyvayushchey mashiny s avtomaticheski izmenyayemym udlineniyem kanata podachi)

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1958, # 1, pp 7-11 (USSR)

ABSTRACT: On the basis of his previous publications [Ref. 1, 2 and 3] the author presents an equation of the motion of a coal-mining machine with one-motor drive, a chain-like cutting tool, and a continuous feeding with the automatic control of the lengthening of the feeding rope. The latter is brought about by means of a hydrodynamic turbocoupling with automatically changing slipping which depends on the motor load, the hardness of the coal being cut, kinematic and constructive characteristics of the machine.

This equation is then re-written in dimensionless form as a function of a number of variables which represent various factors involved. Both equations describe the motion of a coal-mining machine in a non-stationary process. In particular cases, these equations are reduced to simpler ex-

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Equation of Motion of Coal-Mining Machine With Automatic Control of Lengthening of the Feeding Rope

pressions by equating individual variables to zero.
The article contains 3 Ukrainian references.

ASSOCIATION: Institute of Mining of the Ukrainian Academy of Sciences (Instytut hirnychoi spravy AN URSR)

PRESENTED: By Academician of the Ukrainian Academy of Sciences V.S. Pak

SUBMITTED: 20 May 1957

AVAILABLE: Library of Congress

Card 2/2 1. Coal-Machines-Mathematical analysis

D'YACHENKO, M.Ya. [Diachenko, M.IA]

Experimental study of hydrodynamic turbine couplings with automatically varied slippage. Avtomatyka no.4:51-64 '60.
(MIRA 13:11)

1. Institut gornogo dela AN USSR.
(Coal mining machinery--Hydraulic drive)

LEVIN, M.M.; ADAMCHUK, V.D.; GRONSKIY, K.T.; D'YACHENKO, M.Ya.

Prevention of occupational dermatitis in workers of the wet spinning industry. Vest.derm.i ven. 34 no.6:19-21 '60.
(MIRA 13:12)

1. Iz kafedry kozhnykh bolezney (zav. - prof. M.M. Levin), kafedry fakul'tetskoy khirurgii (zav. - prof. S.M. Nekrosov) Smolenskogo meditsinskogo instituta (dir. - dotsent G.M. Starikov) i sdravpunkta Smolenskogo l'nokombinata (zav. V.D. Adamchuk).
(TEXTILE WORKERS --DISEASES AND HYGIENE) (SKIN--DISEASES)

D'YACHENKO, M.Ya., kand.tekhn.nauk

Automation of hydraulic jiggers. Avtom.i prib. no.2:165-176 '61.
(MIRA 14:12)

(Coal washing--Equipment and supplies) (Automation)

D'YACHENKO, M.Ya.

Treatment of small industrial injuries of the fingers and hand caused by spinning wet flax. Trudy SMI 16:150-155 '63.

(MIRA 18:1)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. S.M.Nekrasov) Smolenskogo gosudarstvennogo meditsinskogo instituta.

[redacted]ACHENKO, M.Ya.

Paronychia in workers of the Smolensk Flax Combine and arrangements for its prevention. Sov.med. 28 no.7:128-130 Jl '65.

(MIRA 18:8)

1. Klinika fakul'tetskoy khirurgii (zav. - doktor med.nauk P.P. Alekseyev) Smolenskogo meditsinskogo instituta.

AKUTIN, G.K. [Akutin, H.K.]; GAYEVENKO, Yu.O. [Haievenko, IU.O.]; DYACHENKO, M.Ya.; ZHAROV, M.T.; IVANOV, S.K.; KARNYUSHIN, L.B.; KLODNITSKIY, I.I. [Klodnyts'kyi, I.I.]; KOBUS, Yu.Y. [Kobus, IU.I.]; KOZLYU, V.Y. [Kozliuk, V.I.]; KORYTNIKOV, V.P.; KOROBKO, M.I.; KOSTOGRIZOV, V.S. [Kostohryzov, V.S.]; LADIYEV, R.Ya. [Ladiiev, R.IA.]; MARTYNYUK, H.F.]; MEL'NIK, P.M.; kand.tekhn.nauk; NAVOL'NEV, S.Ya. [Navol'niev, S.IA.]; SIN'KOV, V.M.; SPINU, G.O. [Spynu, H.O.]; SHOYKHET, L.A.; SHUMILOV, K.A.; KORSAK, Yu.Ye. [Korsak, IU.IE.], red.; LAGUTIN, I.A. [Lahutin, I.A.], tekhn.red.

[Automation in industry] Avtomatizatsiia v promyslovosti. Kyiv, Derzh.vyd-vo tekhn.lit-ry URSR, 1960. 288 p. (MIRA 14:12)

(Automation) (Industrial management)

D'YACHENKO, N.F., mayor med. sluzhby

Organization of health education work at a naval base. Voen.med. zhur. no.3:77-79 Mr '57. (MIRA 11:3)

(HEALTH EDUCATION,
in naval bases (Rus)
(MEDICINE, MILITARY AND NAVAL,
health educ. in naval base (Rus)

D'YACHENKO, N.

Training of a young worker. Prof.-tekh. obr. 21 no.6:25-26 Je '64.
(MIRA 17:9)

69841

S/051/60/008/03/020/038
E201/E191

9.4160

AUTHOR: D'yachenko, N.G.

TITLE: A High-speed Photoelectric Spectrometer for the 0.4-0.9 μ Region

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 3, pp 398-399 (USSR)

ABSTRACT: In spectroscopic investigations of rapid processes it is necessary to have the highest possible scanning rate. High-speed spectrometers with scanning by means of an oscillating mirror can give 100/150 spectra/sec (Ref 1). Using a "moving" slit, up to 500 spectra/sec can be obtained (Ref 2). The present note describes a simple scanning device which uses an oscillating mirror by means of which up to 400 spectra can be obtained in 1 second (800 in the case of "mirror" spectra). The resolving power of the instrument is about 300. As a monochromator the author used one half of a double glass monochromator DMR-23. The scanning device replaced the first (counting in the direction of the incident ray) rotatable prism. The device consisted of an electromagnet and a yoke vibrating on an elastic suspension in the form of a steel

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S/051/60/008/03/020/038
E201/E191

A High-speed Photoelectric Spectrometer for the 0.4-0.9 μ Region

strip of 10 x 1 mm cross-section. A plane mirror with dimensions 30 x 25 x 1 mm was attached to the yoke. The length and elasticity of the steel strip were selected so that the natural oscillation frequency of the yoke with the mirror was about 400 c/s. A low-frequency oscillator was used to supply the electromagnet, this oscillator being tuned to resonate at the natural frequency of the mechanical system. The oscillator (with negative feedback through a phase-shifting RC circuit) and a preamplifier included 6N9 and 6P9 tubes respectively. The electromagnet winding was connected directly to the anode circuit of a class C power amplifier (6P3). The fact that the scanning mirror approached or drew away from the exit slit on departure from its equilibrium position was used for automatic focussing of the spectrum on the exit slit during scanning. A photomultiplier FEU-22 was used as a receiver. The photomultiplier signal was passed through a cathode follower and a 75 ohm cable to the vertical amplifier of a cathode-ray oscillograph EN0-1.

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69841

S/051/60/008/03/020/038
E201/E191

A High-speed Photoelectric Spectrometer for the 0.4-0.9 μ Region

The oscillograph worked under slave (driven) sweep conditions and scanning was synchronized by voltage pulses produced in the electromagnet winding. The system included also a device which allowed increase of the scale of individual portions of the spectrograms. Examples of spectrograms obtained with the apparatus described here are shown in Figs 1 and 2. Fig 1б shows a spectrogram extended along the wavelength axis. Externally the apparatus consisted of three portable units.

Card 3/3

This is a complete translation apart from the figures. There are 2 figures and 2 Soviet references.

SUBMITTED: March 12, 1959

BELOUS, V.M.; D'YACHENKO, N.G.

Effect of infrared light on the luminescence of silver chloride. (MIRA 14:8)
Opt.i spektr. 10 no.5:649-652 My '61.
(Infrared rays) (Silver chloride) (Luminescence)

22195

S/048/61/025/004/044/048
B117/B209

24,3500

AUTHORS: Belous, V. M. and D'yachenko, N. G.

TITLE: Effect of infrared light on the luminescence of silver chloride

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, v. 25, no. 4, 1961, 547-548

TEXT: The present paper has been read at the 9th Conference on Luminescence (Crystal Phosphors). The authors have studied the effect of infrared light (from КС-19 (KS-19) and ИКС-3 (IKS-3) filters) upon the light blue luminescence of AgCl. Luminescence was excited by the 366-mμ line with the samples being cooled down to the temperature of liquid air. The light blue luminescence was isolated through an СЗС-18 (SZS-18) filter and recorded by an ФЭУ-19М (FEU-19M). The voltage pulses from the photomultiplier was fed into an ЭНО-1 (ENO-1) cathode-ray oscilloscope. When infrared radiation was turned on during a constant excitation by light, a flashing and subsequent extinction of luminescence was found to take place. Turning off the infrared light is accompanied by a brief attenuation

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S/048/61/025/004/044/048
B117/B209

Effect of infrared light on the ...

of luminescence (negative flash) and by a slow increase in brightness to its steady value. A flash of light blue luminescence (length of the flash about 10 sec^{-1}) can be observed when infrared light is turned on some time after the exciting radiation has been turned off. A repeated application of infrared light does not lead to this effect if the intensity of this radiation exceeds a certain limit. These first results lead to the following conclusion: Under the action of the light exciting the AgCl phosphor, recombination of one part of the electrons and subsequent radiation takes place. The other part is trapped by adhesion levels (traps). When the infrared light is turned on, the electron escape from the traps entails a flash of the light blue luminescence. The intensity of this flash may serve as a measure of the number of electrons stored on these levels, if the intensity of the infrared light is sufficient to free the adhesion levels from electrons. The intensity of the light flash depends hyperbolically on the time between turning-off of the exciting light and turning-on of the infrared light. The dependence of the light flash on the intensity of the exciting light was examined. It was found that the intensity of the flash decreases linearly with increasing intensity of an ultraviolet radiation. The authors ascribe this effect to the de-exciting

action of the exciting light. In the range of infrared intensities used in the experiments it was found that the intensity of the flash during excitation depends linearly on the intensity of the infrared radiation. In thermally treated AgCl samples, the authors observed a green glow which could be quenched by infrared light (without a flash). The orange luminescence of molten AgBr layers is also extinguished by infrared light (IKS-3 filter). A light flash was not observed when the infrared light was turned on. When it was turned off, the brightness of the orange band of AgBr increased considerably faster than that of the light blue bands of AgCl. These results prove the conclusion that different centers are responsible for the light blue and for the green bands of AgCl. These results are indicative of a different luminescence mechanism of the bands concerned. The authors thank T. Ya. Sër and S. I. Golub for their interest in this study. [Abstracter's note: Essentially complete translation.] There are 1 figure and 2 Soviet-bloc references.

ASSOCIATION: Institut fiziki Odesskogo gos. universiteta
(Institute of Physics of Odessa State University)

D'YACHENKO, N.I., aspirant

Increasing the resistance of tomatoes to mosaic and streak.
Zashch.rast.ot vred. i bol. 4 no.1:54 Ja-F '59.
(MIRA 12:2)
1. Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy.
(Tomatoes--Disease and pest resistance) (Mosaic disease)

KLIMENKO, V.G.; D'YACHENKO, N.I.

Globulins of common sunflower(Helianthus annuus L.) seeds. Dokl. AN SSSR 156 no. 2:461-464 My '64. (MIRA 17:7)

1. Kishinevskiy gosudarstvennyy universitet. Predstavleno akademikom A.I.Oparinym.

D'YACHENKO, N.Kh.

[Automobile and tractor motors with pressure feed] Avtotraktornye dvigateli s nadduvom. Leningrad, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry [Leningradskoe otd-nie] 1953. 195 p. (MLRA 6:8)
(Fuel pumps) (Gas and oil engines)

DYACHENKO, N. KH.

USSR/Miscellaneous - Book review

Card 1/1 : Pub. 12 - 14/16

Authors : Yudin, YU. N.

Title : Criticism and bibliography

Periodical : Avt. trakt. prom. 6, 31-33, June 1954

Abstract : N. KH. Dyachenko's book, "The Automobile and Tractor Engines with a Supercharger" Mashgiz, 1953 is reviewed. The book deals with general conceptions of supercharging principles, turbosuperchargers, and engine specifications employing superchargers.

Institution : .....

Submitted : .....

D'YACHENKO, Nikolay Kharitonovich -- awarded sci degree of Doc Tech Sci for the 19 Nov 57 defense of dissertation: "Research on the work of automobile motors under variable regimes"; Prot No 17, 21 Jun 58. (BMVO, 12-58,20)

D'YACHENKO, N. KH.

LENIN, Igor' Mikhaylovich, prof., doktor tekhn. nauk; BOLTINSKIY, N.V., prof., retsenzent; D'YACHENKO, N.Kh., dots., kand. tekhn. nauk, retsenzent; GRIBANOV, V.I., dots., kand. tekhn. nauk, retsenzent; KREPS, L.I., dots., kand. tekhn. nauk, retsenzent; NARBUT, M.V., dots., kand. tekhn. nauk, retsenzent; ALEKSEYEV, V.P., kand. tekhn. nauk, red.; NAKHIMSON, V.A., red. izd-va; MODEL', B.I., tekhn. red.

[Theory of automobile engines] Teoriia avtomobil'nykh dvigatelei. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 270 p. (MIRA 11:10)

1. Deystvitel'nyy chlen Akademii sel'skokhozyaystvennykh nauk (for Boltinskiy).

(Automobiles--Engines)

12(2) SOV/113-59-7-3/19

AUTHOR: D'yachenko, N. Kh., Doctor of Technical Sciences, Belov, P.M., Candidate of Technical Sciences

TITLE: The Work of the Carburetor Engine During Acceleration

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 7, pp 8-12 (USSR)

ABSTRACT: The authors studied the behavior of gasoline engines during acceleration. They explain the causes of the engine power reduction and the higher fuel consumption during acceleration. Analyzing the function of the spark advance mechanism of an R-23 distributor, they established that a 9-10° deviation of the spark advance from the optimum angle will cause a 5-8% power reduction on engines of type ZIL-120 and M-20. They investigated the influence of butterfly valve position changes on the acceleration intensity. A sudden opening of the throttle for accelerating the engine disturbs

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The Work of the Carburetor Engine During Acceleration

internal processes in the engine, causing a decrease of the available power. A slow, gradual opening of the throttle deteriorates dynamic conditions and increases the fuel consumption during the acceleration period. The engine and the automobile cannot develop a high acceleration and the acceleration process is delayed. Consequently, some intermediate position of the butterfly valve will produce the best results. Experiments with ZIL-120 and M-20 engines confirmed this conclusion. The authors further investigate the character of the air flow with different throttle positions, saying that interruptions of the air flow in the intake system may occur with a sudden opening of the throttle. Finally, they recommend some measures for reducing the losses of power and torque of gasoline engines during acceleration. The design of the air/fuel intake may be improved. The intake

The Work of the Carburetor Engine During Acceleration

system may be heated. Additional fuel may be injected during acceleration. The most radical improvement is the direct fuel injection into the cylinders. Corrections of the spark advance mechanism may be made. There are 8 graphs and 3 Soviet references.

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AKATOV, Yevgeniy Ivanovich; BELOV, Pavel Mitrofanovich; D'YACHENKO, Nikolay Kharitonovich, prof., doktor tekhn.nauk; MUSATOV, Vitaliy Sergeyevich; ZHDANOVSKIY, N.S., doktor tekhn.nauk, retsenzent; DUBUSOVA, G.A., red.izd-va; FRUMKIN, P.S., tekhn.red.

[Performance of a motor-vehicle engine under unsteady conditions] Rabota avtomobil'nogo dvigatelia na neustanovivshemsia rezhime. Pod red. N.Kh.D'iachenko. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 247 p. (MIRA 13:4)
(Motor vehicles--Engines)

D'YACHENKO, Nikolay Kharitonovich, doktor tekhn. nauk, prof.; DASHKOV, Sergey Nikitich, doktor tekhn. nauk, prof.; MUSATOV, Vitaliy Sergeyevich, kand.tekhn.nauk; BELOV, Pavel Mitrofanovich, kand. tekhn.nauk,prof.; BUDYKO, Yuriy Ivanovich, kand.tekhn.nauk. Prinimali uchastiye: BURYACHKO, V.R.; GUGIN, A.M.; ZHDANOVSKIY, N.S., doktor tekhn. nauk,prof., retsenzent; YURKEVICH, M.P., inzh., red. izd-va; PETERSON, M.M., tekhn. red.

[High-speed piston internal conbustion engines] Bystrokhodnye porshnevye dvigateli vnutrennego sgoraniia. Moskva, Mashgiz, 1962. 368 p. (MIRA 15:7)
(Gas and oil engines) (Diesel engines)

BESSONOV, L.A.; DOMANSKIY, B.I.; DROZDOV, N.G.; D'YACHENKO, N.Kh.; ZHEKULIN, L.A.; ZAYTSEV, I.A.; ZALESSKIY, A.M.; KAMENSKIY, M.D.; KOSTENKO, M.P.; LEBEDEV, A.A.; LOMONOSOV, V.Yu.; MITKEVICH, A.V.; SMIRNOV, V.S.; TOLSTOV, Yu.G.; USOV, S.V.; SHRAMKOV, Ye.G.

L.R. Neiman; on his 60th birthday and the 35th anniversary of his educational work. Elektrichestvo no.6:93-94 Je '62. (MIRA 15:6)
(Neiman, Leonid Robertovich, 1902-)

ARTAMONOV, M.D., kand. tekhn. nauk, dots.; PANKRATOV, G.P., kand. tekhn. nauk, dots.; D'YACHENKO, N.Kh., doktor tekhn. nauk, prof., retsenzent; BUDNIKOV, V.A., kand. tekhn. nauk, red.; SIROTIN, A.I., red. izd-va; EL'KIND, V.D., tekhn. red.

[Theory and design of motor-vehicle and tractor engines] Teoriia, konstruktsiia i raschet avtotraktornykh dvigatelei. Moskva, Mashgiz, 1963. 520 p. (MIRA 16:10)

1. Zaveduyushchiy kafedroy Leningradskogo politekhnicheskogo instituta im. M.I.Kalinina (for D'yachenko).
(Motor vehicles--Engines)
(Tractors--Engines)

GORODETSKIY, V.I., inzh.; ZYBIN, P.M., inzh.; ISAKOV, Yu.N., inzh.; D'YACHENKO, N.Kh., doktor tekhn.nauk, prof.; LIVENTSEV, F.L., kand.tekhn.nauk, dotsent; MEL'NIKOV, G.V., kand.tekhn.nauk, dotsent

A new gas pipe line compressor station with evaporation cooling of the gas motor compressors. Energomashinostroenie 10 no.1:27-29 Ja '64. (MIRA 17:4)

(A) L 27318-66 EWT(d)/EWT(m)/EWP(t)/ETI IJP(c) JT/JD/WW/JG

ACC NR: AM6001048 Monograph UR/

D'yachenko, N. Kh.; Kostin, A. K.; Mel'nikov, G. V.; Petrov, V. M.; Kharitonov, B. A.

Theory of internal combustion engines (Teoriya dvigateley vnutrennogo sgoraniya) 58
Moscow, Iz-vo "Mashinostroyeniye," 1965. 459 p. illus., biblio. Textbook for students specializing in internal combustion engines at institutions of higher learning. Errata slip inserted. 16,000 copies printed. B+1

TOPIC TAGS: internal combustion engine, carburization, engine combustion system, engine performance characteristic, engine exhaust system

PURPOSE AND COVERAGE: This book is published as a textbook for students in higher technical educational institutions and can also be used as a handbook for engine-design engineers and their technical staffs. It gives an analysis of the internal combustion engine and its applications, from agricultural equipment (stationary and mobile) through automotive and marine uses. A thorough description of turbo-superchargers and engine power rating is included. Fuel and cooling systems and their characteristics are also discussed. This book was prepared by the internal-combustion-engines faculty of the Leningrad Politechnical Institute im. M. I. Kalinin. The authors appear in the following order: B. A. Kharintovich, chapters I and IX; G. V. Mel'nikov, chapters II and VII (Except subheading 4 and 5 in chapter VII); N. Kh. D'yachenko, chapters III and VI (Except subheading 4 in chapter VI); V. M. Petrov, chapters IV and V (Except subheading 1 and 4 in chapter V); A. K. Kostin, chapters VIII, X, and subheading 4 in chapter VII; B. P. Pugachev, subheading 1 and 4 in chapter VI; Yu. N. Isakov, subheading 5 in chapter VII.

Card 1/3 UDC: 621.43.001(075.8)

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X. Automatic control of internal combustion engines -- 406

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D'YACHENKO, N.Kh.; PUGACHEV, B.P.

Using electronic computers in mathematical investigation of the injection process in diesel engines. Trudy LPI no.249:5-11 '65.
(MIRA 18:9)

D'YACHENKO,N.M.; KOLESNICHENKO, I.I.,professor.

Modification of sutures in a V-shaped resection of the lung.
Khirurgiia no.10:81-83 O '55. (MLRA 9:2)

1. Iz kafedry fakul'tetskoy khirurgii (zav.-prof. I.I. Kolesnichenko) Krasnoyarskogo meditsinskogo instituta)
(LUNGS, surg.
resection, V-shaped, suturing)
(SUTURES
in V-shaped resection of lung)

D'YACHENKO, N. M. Cand Med Sci -- (diss) "On the problem of intravital ~~protein~~ proteins denaturation of blood serum in cases of intestinal obstruction." Khar'kov, 1957. 14 pp 20 cm. (Khar'kov State Med Inst), 100 copies (KL, 14-57, 87)

D'YACHENKO, N.M., kand.med.nauk; DUBININ, L.V.

Treatment of gastroduodenal hemorrhages. Sov.med. 28 no.7:103-106 Jl '65. (MIRA 18:8)

1. Khirurgicheskoye otdeleniye (zav. N.M.D'yachenko) Bryanskoy oblastnoy bol'nitsy (glavnyy vrach G.M.Teyf).